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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/889,177	11/27/2001	Carl Tyren	03940.0056	8105

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EXAMINER
PAIK, STEVE S

ART UNIT	PAPER NUMBER
2876	

DATE MAILED: 04/23/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	09/889,177	TYREN, CARL
	Examiner	Art Unit
	Steven S. Paik	2876

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *27 November 2001* .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-13* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-13* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *27 November 2001* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☒ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) *5* .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Priority

1. Acknowledgment is made of applicant's claim for foreign priority based on an application filed in Sweden on January 18, 1999. It is noted, however, that applicant has not filed a certified copy of the 9900119-0 application as required by 35 U.S.C. 119(b).

Specification

2. This application does not contain an abstract of the disclosure as required by 37 CFR 1.72(b). An abstract on a separate sheet is required.

Claim Objections

3. Claim 10, 12 and 13 are objected to because of the following informalities: the claims include a few different reference numerals, "(3_1-3_n,)" " (35,36)" and "(34)", for the same claimed element, electrically conductive members. It is respectfully suggested to either delete those reference numbers in the parentheses or distinguishably claim those elements to eliminate unnecessary confusion. Appropriate correction is required.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 8-13 are rejected under 35 U.S.C. 102(b) as being anticipated by Lagarde (US 4,350,883).

Re claims 8, 12 and 13, Lagarde discloses an apparatus and a method of marking and identifying an object. Lagarde discloses the apparatus includes a plurality of electrically conductive members (2, 3 and 4 in Fig. 2). Each of the electrically conductive members has a unique predetermined diameter (col. 2, ll. 13-29). As the figure shows, the electrically conductive members are formed by an elongated element (Figs. 1 and 2) and may have sections of different diameters. Lagarde teaches that the metallic wires 2, 3 and 4 may be identical to one another or different, but are always selected from a predetermined range of specimens. Based on intended use, the predetermined range of specimens may have different electrical properties, magnetic properties, which do not exclude the possibility of having different physical properties such as the size of the electrically conductive members. Furthermore, the electrically conductive members inherently have galvanic contact with each other. The galvanic contact is a contact having an electrical effect caused by intense excitation of electrically conductive members.

Re claim 9, Lagarde discloses that the electrically conductive members (2-4) are formed as metallic wires, strips or ribbons (col. 2, ll. 25-29).

Re claim 10, Lagarde discloses that the metallic wires, strips or ribbons comprises a non-magnetic metal preferably copper or aluminum (col. 2, line 26).

Re claim 11, Lagarde discloses that the metallic wires, strips or ribbons comprises magnetic material, preferably iron, steel or an amorphous metal alloy (col. 2, ll. 27-29).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

7. Claims 1-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lagarde (US 4,350,883) in view of Humphrey (US 4,660,025).

Re claim 1, Lagarde discloses a method of detecting an article identifying device (label 1) having at least one electrically conductive members (2, 3, and 4). Although the device identifies objects by passing through a high-frequency electromagnetic field and detecting the variation in the corresponding response signals, Lagarde is silent about detecting a discontinuity in variation in impedance of said member.

Humphrey discloses a marker for use in an article surveillance system in which an alternating magnetic field is established throughout a surveillance region and an alarm is activated when a predetermined perturbation to said field is detected, said marker consisting of a body of magnetic material having a magnetic hysteresis loop with a large Barkhausen discontinuity such that exposure of said body to an external magnetic field, whose field strength in the direction opposing the instantaneous magnetic polarization of said body exceeds a predetermined threshold value, results in regenerative reversal of said magnetic polarization, and means for securing said body to an article to be maintained under surveillance (col. 3, ll. 47-60). The above obviously suggests steps of detecting discontinuity in variation in impedance since there is proportional relationship between the impedance and permeability, resistivity of conductive member and frequency.

In view of Humphrey reference, it would have been obvious to an artisan of ordinary skill in the art at the time the invention was made to further employ the steps of identifying, detecting, and comparing magnetic polarization with a predetermined threshold value of a marker having identifiable discontinuity in addition to the object identifier of Lagarde due to the fact that the same object can be achieved using different techniques. Both techniques successfully identify objects in accordance with the change in electrical properties and/or magnetic properties of electrically conductive materials. Furthermore, such functionally equivalent modification would have been an obvious matter of design variation, well within the ordinary skill in the art, and therefore an obvious expedient.

Re claims 2-4, Lagarde in view of Humphrey discloses the method as recited in rejected claim 1 stated above further teaches the apparatus includes a plurality of electrically conductive members (2, 3 and 4 in Fig. 2). Each of the electrically conductive members has a unique predetermined diameter (col. 2, ll. 13-29). As the figure shows, the electrically conductive members are formed by an elongated element (Figs. 1 and 2) and may have sections of different diameters. Lagarde teaches that the metallic wires 2, 3 and 4 may be identical to one another or different, but are always selected from a predetermined range of specimens. Based on intended use, the predetermined range of specimens may have different electrical properties, magnetic properties, and electromagnetic properties, which do not exclude the possibility of having different physical properties such as the size of the electrically conductive members.

Re claim 5, Lagarde in view of Humphrey discloses that the electrically conductive members (2-4) are formed as metallic wires, strips or ribbons (col. 2, ll. 25-29).

Re claim 6, Lagarde in view of Humphrey discloses that the metallic wires, strips or ribbons comprises a non-magnetic metal preferably copper or aluminum (col. 2, line 26).

Re claim 7, Lagarde in view of Humphrey discloses that the metallic wires, strips or ribbons comprises a magnetic material, preferably iron, steel or an amorphous metal alloy (col. 2, ll. 27-29).

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Yamashita et al. (US 5,204,526) discloses a magnetic marker including a plurality of thin strips or wires of magnetic material with unique magnetic characteristics. The marker further comprises a plurality of exciting coils for producing a rotating magnetic field to identify articles with high accuracy.

Jahnes et al. (US 5,729,201) discloses an identification tag using amorphous wires. The tag is interrogated by the use of ramped field or an ac field or a combination of the two.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven S. Paik whose telephone number is 703-308-6190. The examiner can normally be reached on Mon - Fri (5:30am-2:00pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael G. Lee can be reached on 703-305-3503. The fax phone numbers for the organization where this application or proceeding is assigned are 703-746-6893 for regular communications and 703-308-7722 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0530.

Steven Paik

Steven S. Paik
Examiner
Art Unit 2876

ssp
April 18, 2003

KARL D. FRECH
PRIMARY EXAMINER